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14. ABSTRACT

Air Force Smart Operations for the Twenty-first Century (AFSO 21) is the Air Force?s initiative to recapitalize funds by maximizing value and minimizing waste in operations. This is a fundamental shift by the Air Force toward a desired end state of continuous process improvement. Will AFSO 21 change the culture of the Air Force? A successful change requires a balance between the system components of culture, vision, structure, leadership, and systems. Air Force leadership may avoid failure in its AFSO 21 implementation if it addresses potential failure points before they fester and take root. The first potential failure point is focusing only on culture and thus creating an unbalanced system or organization. The next potential failure point is the inflexibility of the Air Force structure. A third potential failure point is its human resource management systems. When it comes to ?quality? programs, Air Force midlevel officers are experiencing d?j? vu. How will midlevel officers accept it? The failure to win over Generation TQM, the midlevel officers, is a fourth potential failure point for the sustainment of AFSO 21. Does the Air Force have a vision for AFSO 21? The Air Force must rectify this disparity between vision and message and remove a final potential failure point in sustaining AFSO 21. This paper identifies potential failure points associated with the changing Air Force culture. Overall, the Air Force?s change plan appears to be proceeding according to schedule. However, it does not appear that the Air Force is adequately planning for a long-term sustainment of AFSO 21. There is still time for Air Force senior leadership to correct the system?s alignment and put AFSO 21 on track for long-term sustainment. A culture of continuous process improvement will take root once the Air Force leadership fully commits to AFSO 21.

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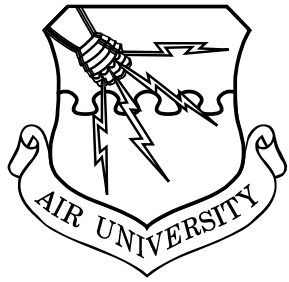

Air Force Smart Operations for the Twenty-first Century

Identifying Potential Failure Points in Sustaining Continuous Process Improvement across the Air Force

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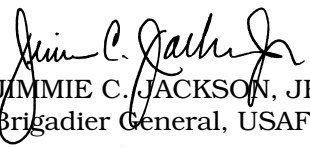
Foreword

It is my great pleasure to present another of the *Wright Flyer Papers* series. In this series, the Air Command and Staff College (ACSC) recognizes and publishes our best student research projects from the prior academic year. The ACSC research program encourages our students to move beyond the school's core curriculum in their own professional development and in "advancing air and space power." The series title reflects our desire to perpetuate the pioneering spirit embodied in earlier generations of Airmen. Projects selected for publication combine solid research, innovative thought, and lucid presentation in exploring war at the operational level. With this broad perspective, the *Wright Flyer Papers* engage an eclectic range of doctrinal, technological, organizational, and operational questions. Some of these studies provide new solutions to familiar problems. Others encourage us to leave the familiar behind in pursuing new possibilities. By making these research studies available in the *Wright Flyer Papers*, ACSC hopes to encourage critical examination of the findings and to stimulate further research in these areas.



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Brigadier General, USAF
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Abstract

Air Force Smart Operations for the Twenty-first Century (AFSO 21) is the Air Force's initiative to recapitalize funds by maximizing value and minimizing waste in operations. This is a fundamental shift by the Air Force toward a desired end state of continuous process improvement. Will AFSO 21 change the culture of the Air Force? A successful change requires a balance between the system components of culture, vision, structure, leadership, and systems.

Air Force leadership may avoid failure in its AFSO 21 implementation if it addresses potential failure points before they fester and take root. The first potential failure point is focusing only on culture and thus creating an unbalanced system or organization. The next potential failure point is the inflexibility of the Air Force structure. A third potential failure point is its human resource management systems.

When it comes to "quality" programs, Air Force midlevel officers are experiencing déjà vu. How will midlevel officers accept it? The failure to win over Generation TQM, the midlevel officers, is a fourth potential failure point for the sustainment of AFSO 21. Does the Air Force have a vision for AFSO 21? The Air Force must rectify this disparity between vision and message and remove a final potential failure point in sustaining AFSO 21.

This paper identifies potential failure points associated with the changing Air Force culture. Overall, the Air Force's change plan appears to be proceeding according to schedule. However, it does not appear that the Air Force is adequately planning for a long-term sustainment of AFSO 21. There is still time for Air Force senior leadership to correct the system's alignment and put AFSO 21 on track for long-term sustainment. A culture of continuous process improvement will take root once the Air Force leadership fully commits to AFSO 21.

Preface

I have always been a proponent of working smarter and not harder. I could never stand to hear the words "we've always done it this way." Those words were enough to send shivers up my spine. I believe, as leaders, we should always try to find better, faster, smarter ways of doing business. In addition, we should naturally solicit honest feedback and opinions from our people. Sometimes we tend to complicate our lives by introducing programs that involve new languages, rules, processes, training, and so forth. I think leadership is much simpler than that—it is serving your people.

I selected this topic with the hope of learning more about Air Force Smart Operations for the Twenty-first Century (AFSO 21). I do believe its philosophy and principles are sound. However, as a member of "Generation TQM (Total Quality Management)" (see section on "Midlevel Officers—Generation TQM"), I am skeptical about creating and implementing another "quality" program. I do believe it is a fad which will soon fade away.

I would like to acknowledge several people who made significant contributions that enabled me to complete this research odyssey—it has been a strange ride. I owe thanks to Lt Col Bill Polakowski, my research advisor, and his deputy, Maj John Sawyer, for tackling this new and challenging class—a job well done. I owe special thanks to Maj Kelly Jost for being my cohort in crime. She was invaluable in helping me keep my sanity throughout the research process. In addition, I would like to give a "shout out" to the Third Herd—you guys rock.

I owe a very special thanks (and a place in my heart) to my wife, Joy. She endured my many late nights and cranky days as I pounded the keyboard. Thank you all. I'll see you on the other side.

Introduction

Money makes the world go around, of that we both are sure.

—Lyrics from "Money, Money"

This line from the musical *Cabaret* highlights a certain truth in the world. Whether it is people, businesses, or militaries, money is the engine that powers them all. For example, people must have money to provide adequately for themselves and their families. Businesses must have money to operate and earn a profit. In short, money makes the world go around. Militaries are not exempt from this economic reality.

It takes a tremendous amount of money to operate a world-class military. To illustrate this point, the requested fiscal year 2008 budget for the United States Air Force is over $110 billion. Moreover, the Air Force has requested another $17 billion for operations supporting the global war on terror.[1] However, even this amount is not enough. The Air Force needs more funds to modernize and recapitalize its aging fleet. Many aircraft have long passed their intended life span. For example, the average age of the KC-135E Stratotanker is 48 years old, and the B-52H Stratofortress is 45 years old.[2] Operational and budgetary pressures further hinder the modernization and recapitalization effort. Fiscal pressures include rising operating costs (e.g., personnel and energy resources) and cutthroat interservice competition for defense funds. Operational pressures include funding new weapon systems, assuming new missions, and sustaining current mission requirements. These pressures stress an already constrained budget.

These budget problems are basic Economics 101. The Air Force has "x" amount of dollars to pay for "y" amount of goods and services. If the need for "y" is greater than for "x," then the reduction of expenses and fiscal obligations is the only way to generate the necessary savings. Air Force Smart Operations for the Twenty-first Century (AFSO 21) is the Air Force's initiative to recapitalize funds by maximizing value and minimizing waste in operations. Per the secretary of the Air Force, Michael W. Wynne, and the Air Force chief of

staff, Gen T. Michael Moseley, "our strategy will be a comprehensive effort to improve our work processes across our Air Force."[3] This is a fundamental shift by the Air Force toward a desired end state of continuous process improvement.

AFSO 21 incorporates many different types of process-improvement models such as Lean, Six Sigma, and the Theory of Constraints. According to the director of the AFSO 21 office, Brig Gen S. "Taco" Gilbert, the intent is to build a toolkit with a variety of tools that are flexible enough to apply across many areas.[4] The Air Force is emphasizing Lean because of its "infectious quality [with] quick, visible results that cause natural replication."[5] Undeniably, the Air Force is trying to ensure AFSO 21 develops and infectiously spreads across the Air Force. As expected, positive results (i.e., quick wins) are pouring in from units. The program appears to be working, efficiencies are being gained, and money is being saved—but for how long?

The introduction of a new Air Force–wide program generates many questions regarding the "real" reasons behind it. For instance, is AFSO 21 just a short-term initiative to navigate the Air Force through a few years of treacherous financial waters? What happens if the current operations (and thus the cost) of the global war on terror decrease? What if energy costs suddenly fall and maintain a steadily low price? What happens after Presidential Budget 720 force reductions are off the financial ledgers? Will leadership's interest with continuous process improvement wane once fiscal and operational pressures are alleviated?

On the other hand, is AFSO 21 a long-term program for developing the world's best combat force? Will it actually improve combat readiness? Will it increase the delivery of war-fighting capabilities? Will it ultimately shorten the "kill chain" in combat? According to Secretary Wynne, AFSO 21 will be around for a long time. In a letter to Airmen, he stated that "the continuous process improvements of AFSO 21 will be the new culture of our Air Force."[6] Therefore, one can submit that the sustainment of AFSO 21 is dependent upon reaching the desired end state. One must also derive that the desired end state is a culture of continuous process improvement. Thus, the Air Force must change to achieve the end state and become a continuous-process-improvement organization. This task is not as easy as it sounds.

The Air Force has tried an organizational culture change—in the name of quality—before. A little over a decade ago, the Air Force tried to sow the seeds of quality on its force. That foray was Quality Air Force or Total Quality Management (TQM); the program ultimately failed to take hold and sustain itself. So what is different this time around that will enable a new continuous-process-improvement culture? The philosophy and principles of Lean and Six Sigma are sound; the problems with these programs will be with their implementation. Therefore, this paper does not debate or challenge the merit of the AFSO 21 program. Instead, it explores how the Air Force is implementing AFSO 21 and discusses potential failure points. It is too late to suggest how to initiate the program, but it is not too late to bring awareness to possible stumbling points in sustaining a long-term culture of continuous process improvement. Furthermore, it is about changing the culture, which requires a balance between the parts of the organization. The thesis of this study is that AFSO 21 will fail to sustain itself unless there is a successful change in Air Force culture—a change requiring a balance between the system parts of vision, structure, leadership, and systems.

Organizational Change

> *I cannot say whether things will get better if we change; what I can say is they must change if they are to get better.*
>
> —Georg C. Lichtenberg

Change is in the air. The Air Force is trying to become smarter, faster, cheaper, and more efficient. The current status quo of doing business is unacceptable to the secretary and the chief of staff of the Air Force. As already acknowledged, there is a new desired end state; it is an Air Force culture of continuous process improvement. The challenge for the Air Force is making the change from the current state to the desired end state. Organizational change is hard but is predictable and manageable. To establish a common understanding of what is involved with

implementing and sustaining a transformation initiative, the concept of change is first briefly explored.

A Journey across the "Unknown" State

Organizational change "is a dynamic process, rather than a series of events."[7] Human nature tends to gravitate toward the path of least resistance. The tendency is to believe that very simple answers will handle the complex problems we face. However, change requires more than simply redrawing an organizational chart. It is active and is in constant motion. Change is relentlessly creating a new crisis or challenge. This dynamic process requires an organization to continuously monitor and adjust its activities accordingly. As the rate of change fluctuates, leadership and followers must adapt to it. Failing to adapt can lead to a slowdown or discontinuation of the change effort.

Another way to frame change is by looking at it from a different perspective. Organizational change occurs when an organization realizes there is a significant gap between its current and desired environment. This unknown state is a foreign and mysterious place. Change occurs when an organization closes this gap (see fig. 1).

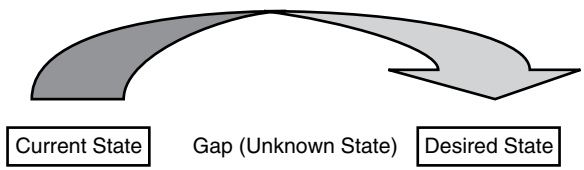

Figure 1. Change gap. (Developed by author using concepts of Earl Walker, *Changing Organizational Culture: Strategy, Structure, and Professionalism in the U.S. General Accounting Office*, 1st ed. [Knoxville: University of Tennessee Press, 1986].)

"Failure to close this gap . . . that is, the failure to change—will spell doom for the organization."[8] Closing this gap is difficult.

The trek across the unknown state is an unfamiliar journey (or at least for the people in the organization). After all, the people must endure the process. Involving the human aspect injects a host of other complications such as

emotions. According to Jeanie Duck, "Changing an organization is inherently and inescapably an emotional human process."[9] This emotional process may include uncertainty, fear, and excitement. As we will discover, the introduction of the human aspect further complicates the change effort.

Thus, an organization's change effort is dependent upon discovering the best way(s) to close this gap. Random, unplanned forays for closing the gap are discouraged because it is easy to become lost, overwhelmed, and discouraged. This "close the gap" endeavor requires a broad plan of action focused on the long term. The journey will be long, but successfully changing an organization is dependent upon reaching the end state.

How to Change (and How Not to Change)

Once an organization realizes it must change, the next step is determining how to change. There are a number of drivers for, and barriers to, change. Duck frames change efforts into three essential elements:

1. Strategy: a passionate belief in where you're going. Clear strategy [that is] more easily understood . . . translates into action.
2. Execution: good, basic management. Indispensable during radical change.
3. Manag[ement of] all the human issues that swirl around change.[10]

In her view, the most important driver of change is managing all of the human issues that swirl around it. This perspective on how human issues affect change resurfaces later in this paper.

Another example of how to implement change is John Kotter's eight steps to transforming your organization (fig. 2). He argues that change requires much more effort than simply redrawing organizational charts. A true transformation of an organization requires leadership and all of its trappings. However, these steps are not as simple. An organization will transition through the steps at different speeds—sometimes fast, but most often slowly.[11]

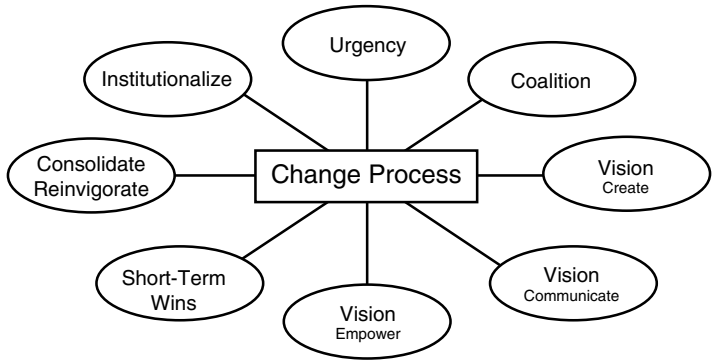

Figure 2. Kotter's eight steps to change. (Reprinted from John P. Kotter, *John P. Kotter on What Leaders Really Do* [Boston: Harvard Business School Press, 1999], 92.)

Moving through these steps is complicated and time-consuming—it can take years. According to Kotter, this is where trouble begins with the change initiative. These long periods are "incomprehensible to short-term, reactive managers." As a result, they are more likely to make a critical mistake in one of the steps, which "can have a devastating impact, slowing momentum and negating hard-won gains."[12] Kotter has categorized these critical mistakes into eight barriers to change (fig. 3):

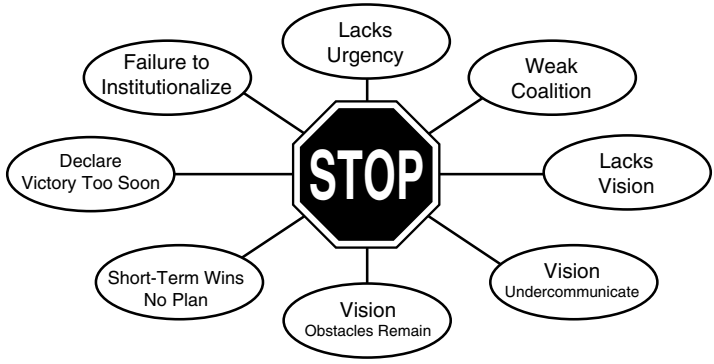

Figure 3. Kotter's eight change-process barriers. (Developed by author based on John P. Kotter, *John P. Kotter on What Leaders Really Do* [Boston: Harvard Business School Press, 1999], 60–67.)

Change efforts are nothing new to the Air Force. It has undergone many organizational and cultural changes such as realignment of major commands and the bomber-to-fighter coup d'état. However, not all changes took root. The Air Force's attempt in the 1990s at a "quality" culture experienced many of Kotter's change barriers. Admittedly, the Air Force "made mistakes in implementing TQM and there were some significant flaws in the approach itself."[13] With this in mind, it is one thing to acknowledge past mistakes, but it is another thing to learn from them.

Did the Air Force learn from its past failures and develop a comprehensive strategy and change plan for AFSO 21? Furthermore, what is the best way to analyze these products and the survivability of AFSO 21? Utilizing the systems thinking approach allows us to conceptualize the Air Force and identify potential failure points for AFSO 21.

Systems Thinking Approach

> *The significant problems we have cannot be solved at the same level of thinking with which we created them.*
>
> —Albert Einstein

The Air Force is a large, complex organization, thereby making it a challenge to grasp and understand its many interdependent components. The systems thinking approach provides a structure for visualizing the organization as interrelationships and not just separate parts. This approach also provides a means to identify potential failure points in changing the Air Force culture to one of continuous process improvement. The intent of this discussion is not to fully utilize the systems thinking processes of loops and links, diagnostics, systems archetypes, or computer modeling. Instead, it simply uses systems thinking to conceptualize the Air Force and its components so that potential failure points in the change initiative can be identified. However, before examining the various components, it is important to examine systems thinking.

What Is Systems Thinking?

Systems thinking is a process for looking at the whole and not its parts, a concept popularized by Peter Senge. In his

book *The Fifth Discipline*, Senge suggests that "systems thinking is a discipline for seeing wholes, recognizing patterns and interrelationships, and learning how to structure those interrelationships in more effective, efficient ways."[14] To spin an old country saying, it is seeing the forest and not just the trees. As an illustration, consider the composition of an automobile. It consists of thousands of individual parts that connect to form a large, complex system. In addition, there are smaller subsystems such as electrical, brake, and fuel systems. Each part directly or indirectly affects the operation of the automobile. The key concept is that each part, no matter the size or importance, has a central role in the system. However, if there is a problem, the complexity of the automobile makes it difficult to determine which part is failing (or has failed). The systems thinking approach allows the mechanic to see the interrelationships rather than parts. This approach is useful in troubleshooting because it eliminates the mayhem under the hood. In his book *Systems Thinking: Managing Chaos and Complexity,* Jamshid Gharajedaghi submits that systems thinking provides "a holistic picture that will allow us to see through chaos and understand complexity."[15]

In essence, systems thinking is an excellent way to view change because it focuses not on the individual component but rather the big picture. This is very useful when examining large, complex organizations like the Air Force. Systems thinking "organizes complexity into a coherent story that illuminates the causes of problems and how they can be remedied in enduring ways."[16] Understanding the system as a whole enables us to predict, influence, or control its behavior.

Interrelationships Take Time

Changes to a system do not occur overnight. It takes time to make holistic changes due to processes, linkages, and interactions between the components; these are complex and dynamic interrelationships. "Very often, people expect improvements too soon after changes are implemented."[17] This may explain why long-term change efforts sometimes fail in organizations. In some cases of failure, a frequent mistake is overlooking these interrelationships. It is important to remember that changing or ignoring one part of

a system can have consequences elsewhere. This is even more apparent when one considers that organizations do not operate in a vacuum; they interact with both internal and external environments. The level of these interactions varies between simple and complex relationships. Therefore, leaders need a tool to distinguish processes, patterns, and relationships from events.

Just Like Tires—Alignment and Balance Matter

"Systems thinking is a useful tool to initiate organizational change and continuous improvement."[18] Michael Beer provides an organizational change model for leaders.[19] He believes "one of the keys to successful organizational change is ensuring that all components in Figure [4] are in alignment."[20] In other words, no one component is an island; all components must work in unison to achieve the desired change. However, there is a difference in the amount of time and energy invested in each component. Organizations must find the appropriate balance. "Any imbalance diminishes the system's ability to effectively accomplish its purpose and causes conflict within the system."[21]

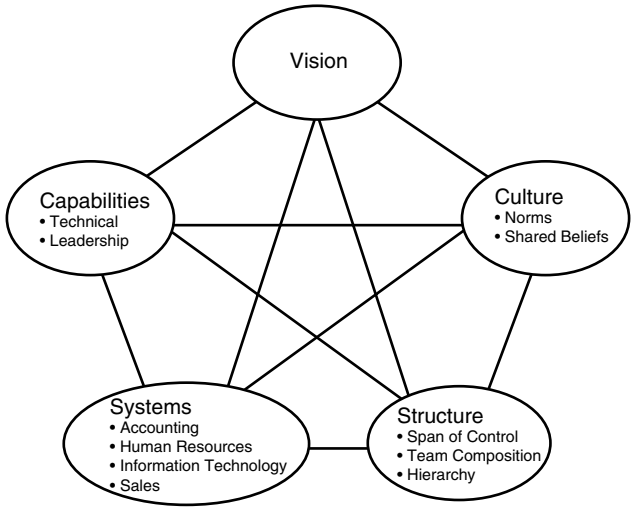

Figure 4. Beer's system model for change. (Reprinted from Richard L. Hughes, Robert C. Ginnett, and Gordon J. Curphy, *Leadership: Enhancing the Lessons of Experience*, 5th ed. [Boston: McGraw-Hill Custom Publishing, 2006], 397.)

The following discussion utilizes Beer's system model to identify potential points of failure to sustaining AFSO 21 and its culture of continuous process improvement. This is important because change failures often occur when only addressing one part of a larger, complex system. As a result, an organization focuses on the symptom and not the problem. This focus on a short-term symptom fails to address the long-term problem; thus, the energy and resources directed at it will not create a culture of continuous process improvement. "[Culture] does not stand alone; it must operate effectively (in balance) with other parts for the system to accomplish its purpose."[22] The sustainment of a long-term program demands that "no area of the organization can be off-limits or protected."[23] Because of this, the Air Force must be willing to address the long-term problems of change resistance and not just the symptoms.

Potential Failure Point No. 1
It's the Culture, Stupid—Or Is It?

The continuous process improvements of AFSO 21 will be the new culture of our Air Force.

—Michael W. Wynne, secretary of the Air Force

Secretary Wynne has zeroed in on culture as the key to making continuous process improvement a reality. In his view, "we must fundamentally change the culture of our Air Force so that all Airmen understand their individual role in improving their daily processes and eliminating things that don't add value to the mission."[24]

Organizational culture is a mystifying thing. How else does one explain how a deftly constructed strategy can fail when employees do not buy into it? After all, is strategy not the driver for action? Or, on the contrary, does culture drive how effectively people work together? For instance, an organization's strategy is to increase efficiencies across the organization. However, if its culture is one where people get the job done at any cost, then the disparity between the strategy and the culture could be impossible to achieve. The challenge for organizations is overcoming these differences in order to sustain a long-term change. Hence, an impor-

tant aspect to organizational change is the understanding of how to change culture while keeping it in alignment with the plan.

First of all, it is very difficult to change what one does not comprehend. Therefore, it is important to establish an understanding of culture. "If we understand the dynamics of culture . . . we will have a deeper understanding not only of why various groups of people or organizations can be so different, but also why it is so hard to change them."[25] Secondly, it is important to understand why attempts to change it fail. So what is culture?

What Is Culture?

It appears that a definitive meaning of culture does not exist. The definition is open for interpretation depending upon the subject, the career disciplines, or context. For example, Samuel Huntington defines culture as "the values, attitudes, beliefs, orientations, and underlying assumptions prevalent among people in a society."[26] Edgar Schein defines culture as "a pattern of shared basic assumptions that was learned by a group as it solved its problems . . . taught to new members as the correct way to perceive, think, and feel in relation to those problems."[27] For our discussion, probably the most appropriate definition incorporates the works of Huntington, Schein, and others. James Detert sums it up best, saying that "there is some consensus that organizational culture is holistic, historically determined, and socially constructed, and it involves beliefs and behavior, exists at a variety of levels, and manifests itself in a wide range of features of organizational life."[28] To put it in an overly simple way, culture influences how effectively employees work together. Moreover, according to Schein, "leadership creates and changes cultures."[29]

More Than the Culture

According to Hughes, "a common mistake for many leaders is to change the organization's vision, structure, and systems and overlook the organization's culture and leader and follower capabilities."[30] As previously demonstrated, equally important to changing culture is changing the other parts of the system. Leadership may avoid a culture change

failure if it addresses potential failure points before they fester and take root. Therefore, a potential failure point for sustaining AFSO 21 is focusing only on the culture and thus creating an unbalanced system.

Potential Failure Point No. 2
Inflexible Structure

You do need to put people into a new organizational context that creates new roles, responsibilities, and relationships if you are to affect their behavior.

—Gen Bill Creech, USAF, Retired
Five Pillars of TQM

Jack Welch, the former CEO of General Electric (GE), is famous for restructuring GE and instilling a process-improvement culture. He is a firm believer in a decentralized approach to organization. In his book *Jack: Straight from the Gut*, Welch predicts that "hierarchy is dead. The organization of the future will be virtually layerless and increasingly boundaryless, a series of information networks in which more electrons and fewer people will manage processes."[31]

Does the Air Force's current organizational structure support the idea of continuous process improvement? If not, can it change? Alternatively, will the autocratic hierarchy, which defines the Air Force, become a potential failure point? The answer for both of these questions is, it depends. As a result, the structure, or its inflexibility, is an AFSO 21 potential failure point.

Combat versus Business

The Air Force desires a culture of continuous process improvement. The only way to reach and sustain the desired end state is to address the structure. However, upon reviewing AFSO 21 key documents (e.g., concept of operations [CONOPS], White Paper, and Implementation Plan), the restructuring of the organization does not gather much attention. A successful continuous-process-improvement program requires a flat organization. It is team-based and void of layers of unnecessary management. In keeping with the philosophy of eliminating waste, the pathway of every

product must be simple and direct. In order to make it work, the Air Force must move from a centralized approach to a decentralized approach to improve efficiencies. "A centralized approach provides improved control while decentralization leads to employee autonomy and empowerment."[32]

Due to the conglomerate makeup of the Air Force, delayering the organization will be difficult. This conglomerate consists of many different types of industries such as service, financial, and manufacturing. Although these industries seem to mirror private businesses, the distinguishing factor is the "go to war" side of the business. Therefore, I developed the depicted organizational model, which categorizes the Air Force structure (i.e., industries) into combat and business groupings (fig. 5). Of course, the Air Force does not categorize its structure this way. Air Force Instruction (AFI) 38-101, *Manpower and Organization*, categorizes the Air Force in a variety of structures, such as a wing, center, direct reporting unit, or nonunit.

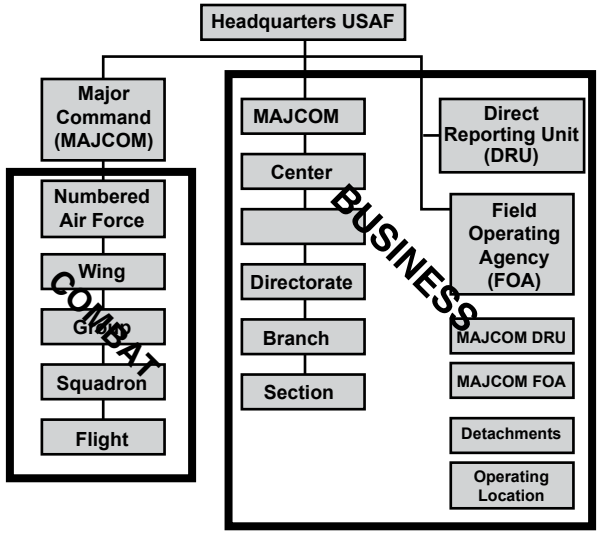

Figure 5. **Air Force standard levels of organization**

The depicted organizational model categorizes the standard Air Force wing structure as "combat." Per AFI 38-101, "the standard wing generates and employs combat capability."[33] Alternately, the "business" category designates those organiza-

tions aligned closer with industry (i.e., noncombat). Within the combat category of the model, organizations such as aircraft maintenance and communications also fit the business category requirements, depending on their combat/peacetime status. To a private corporation, a conglomerate like the Air Force is not efficient because there are too many financially draining suborganizations. The key is to understand your business; do it well. Divest of what does not fit. For example, GE conducted "a stem-to-stem review of [its] conglomerate makeup and produced over $9 billion in divestitures. In addition, it reduced a diverse mix of 350 businesses to 13 core businesses."[34] Can the Air Force accomplish such a divestiture?

Dr. Jekyll and Mr. Hyde

This conflict between business models is a classic "Dr. Jekyll and Mr. Hyde" phenomenon. The Air Force does not really understand what it is—a manager of violence or a *Fortune* 500 company. The Jekyll-and-Hyde metaphor is ideal for describing the bipolar actions of the Air Force as it constantly changes between its combat and business faces.

Dr. Jekyll desires to operate his business as efficiently as possible. His focus is production, eliminating waste, and reducing cycle times. He wants to make a profit (or recapitalize dollars to spend elsewhere). His ideal structure is a decentralized approach. In his mind, a flatter organization means increased efficiency and cost savings. "The plain fact of life is that authentic quality improvements demand the flattening of structures, the liberation of line management from corporate control . . . and the breakdown of functional foxholes."[35] Jekyll wants to "adopt the business-management language of those cutting the budgetary pieces of the pie and gradually whittle away at the warrior culture."[36] This "efficiency" approach appears good for business, but what about combat? In contrast, Hyde's perspective is much different from Jekyll's.

Mr. Hyde desires to blow things up; he wants effects, not efficiency. His focus is defeating the enemy before he defeats you. Hyde delivers "sovereign options for the defense of the United States and its global interests—to fly and fight in Air, Space, and Cyberspace."[37] Sure, he would like to be as efficient as possible on the battlefield, but that is not a requirement—survival is. In the heat of battle, efficiencies go out the window. If a unit

is in serious trouble, everything available is sent to save it. Does it matter if the Lean process determined two aircraft would be enough? Does it really matter whether nine aircraft respond instead of two? The unit in trouble demands effects, not efficiency. As Tom Clancy and Chuck Horner's *Every Man a Tiger* observes, "The military is used to operating in the fog of war, a world of uncertainty, and at levels of efficiency that might reach 5 or 10 percent—such levels of uncertainty [will not] cripple a military operation, only lower its efficiency."[38]

Equally important as effects is decision making. In combat, there is no time for team decisions; leaders must step up and tell troops what to do—sometimes there is validity to the term "gut feeling." Hence, Mr. Hyde views layers of organizations as unavoidable. There must be a chain of command—people must be in charge. The Air Force even touts this in the AFSO 21 CONOPS: "The Air Force must leverage the advantages we have over . . . large commercial and public organizations [such as] well-defined lines of authority." [39] Due to the demands of combat, Mr. Hyde prefers the centralized approach.

Is the Zenith Good Enough?

The Air Force understands its mission; it does it well. Nevertheless, due to its unique mission of defending the United States, the Air Force cannot divest of the business side. It needs to keep the business side because there is no other viable option for supplying and maintaining combat systems and infrastructure. However, every few years, some of the business side divests via outsourcing. In addition, the Air Force is slowly changing to reflect its new "flattening" position. As indicated in AFI 38-101, "organizations must encourage rapid decision making, so they should be flat structures without immediate levels, unless mission requirements cannot otherwise be met. . . . Both the number of supervisors and the number of internal subdivisions within organizations should be designed to minimize layers and maximize worker-to-supervisor ratios."[40]

However, this effort is not one of active encouragement; it will not make a significant difference. The root problem is that the Air Force does not know who it is today (Dr. Jekyll) or who it will be tomorrow (Mr. Hyde). As a result, the Air Force's bipolar disorder will prevent a substantial change

in structure. Although the Air Force will make minor structural changes, this tweaking and massaging will only support short-term results. This struggle between Jekyll and Hyde will allow only minimal movement up and down the efficiency spectrum (fig. 6).

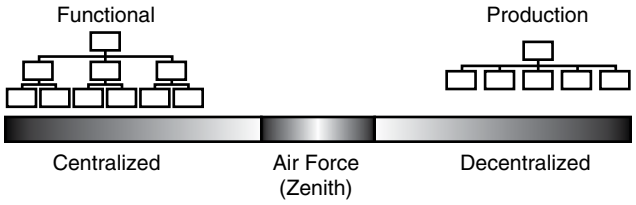

Figure 6. Efficiency spectrum

The centralized spectrum is a traditional hierarchy structure while the decentralized end of the spectrum is flat. The ability and capability for continuous process improvement resides in the decentralized spectrum. The minimal movement on the spectrum is because of both personalities [Jekyll and Hyde] countering each other's efforts. Two steps forward today could be two steps backward in six months. An imbalance in other system components (e.g., change of leadership or poor incentives) is usually the reason for this countering effect. This Jekyll-and-Hyde tug-of-war drags out the effort and increases the chances for potential failure points.

Therefore, the Air Force's desire for establishing and sustaining a continuous-process-improvement organization will stop short of "true" efficiency. Its zenith will reside somewhere in between the two ends of the spectrum. Will the efficiency zenith be good enough? Consequently, the inflexibility of the Air Force structure is a potential failure point for AFSO 21.

Potential Failure Point No. 3
Human Resource Management Systems

Don't fight the system. Change the rules and the system will change itself.

—Gene Bellinger
"Beaucracy and Organizational Politics"

Organizations consist of many different types of systems. There are production systems, financial systems, and supply systems, to name a few. These systems are all vital to an organization's ability to operate. Consider a maintenance process's interrelationship with the supply system. A process-improvement team can "Lean" out an aircraft repair process so well that it makes one's eyes water. However, without a corresponding change in the legacy supply system, those technicians must nevertheless wait on the inefficient supply system despite their perfect process. For this reason, systems must keep up with changes occurring elsewhere in the organization. Therefore, a potential failure point for sustaining AFSO 21 is the human resource management (HRM) system.

What about the People?

"The key to an effective organization is to align the structure with strategy and at the same time to design high commitment human resource policies and practices."[41] Since people manage and operate an organization, human resources are the core of an organization. Hence, when trying to change the organization's culture, systems should be a primary consideration in the strategic planning phase. Systems serve to develop and reinforce organizational culture. With this in mind, will the Air Force pay attention to the HRM system?

A thorough review of AFSO 21 key documents does not reveal such consideration. Why were HRM systems left out of the strategic planning for AFSO 21? After all, decisions about how people are managed make a difference. The Air Force is well aware of the significance of its people. The AFSO 21 CONOPS emphasizes the "use of our greatest resource . . . our innovative, dedicated Airmen."[42] Consequently, where is the emphasis on HRM systems? These systems help guide and shape Airmen's behavior. Addressed next are two key areas of HRM that enable the sustainment of a continuous-process-improvement culture: incentives and staffing.

Wrong People off the Bus

The Air Force is trying to rationally appeal to its employees by informing and educating them on the importance

of a continuous-process-improvement culture. Articles and messages crying that the "fiscal sky" is falling have bombarded Airmen. The problem with this approach is that, in most cases, these budgetary constraints have not affected Airmen at their local operating level. Therefore, saving the Air Force programmed money is not an attractive selling point. It does not answer the questions, What is in it for me, and why should I care? However, HRM practices and polices directly affect Airmen. Michael Beer articulates that "decisions about human resource policies affect levels of employee commitment."[43]

The two most attractive incentive areas for policy adjustment are promotions and evaluations. The day continuous process improvement becomes officially part of the promotion and evaluation process is the day people start taking AFSO 21 seriously. Airmen will need to know that their evaluations, promotions, and appraisal bonuses are dependent on having significant amounts of continuous process improvement in their respective areas of responsibility.

Consider the promotion process and the mixed signals that it currently sends Airmen. The promotion process should favor Airmen who are most concerned with group improvement. However, the current system does not favor this approach. According to Bellinger, current promotion processes focus on individual performance rather than on the team. "One of the most prevalent of these mixed messages comes from management continuing to talk about the benefits of a team based operation, while still performing individual performance appraisals."[44] The Air Force needs promotions and evaluations based on how Airmen's attitudes and capabilities fit the desired continuous-process-improvement culture. As Jim Collins observes in his book *Good to Great*, the "transformation [began] by first getting the right people on the bus (and the wrong people off the bus)."[45]

Right People on the Bus

Retention and recruitment both encompass staffing. As mentioned earlier, people are at the center of an organization. Retention is significant because the Air Force invests a lot of time and money in training Airmen. Likewise, re-

cruiting is just as important as retention. Because of this, selecting and hiring qualified people save on the amount of time and money required before the Airman becomes a productive contributor.

High labor turnover makes sustaining a culture of continuous process improvement difficult. The Air Force's permanent change of station (PCS) is an excellent example of high turnover and a potential change barrier. The Air Force frequently PCSs its force. (Although a recent budgetary constraint has slowed down PCSing, the effort to instill a continuous-process-improvement culture did not factor this into the decision to extend time on station.) The cumulative effect of PCSs is staggering. It is probably safe to say that within a five-year window a majority of Air Force personnel has changed duty assignments. This fluid workforce erodes culture-change momentum in organizations. "Management reshuffling regularly strips away program champions and replaces them with managers who may not share the interests or the skills of those who initiated existing programs."[46] Should the Air Force go ahead and make extended time on station a policy?

When recruiting an individual, how selective is the Air Force? Does the Air Force base recruiting efforts on a recruit's predisposition for continuous process improvement? Is recruiting another example of the Air Force's Jekyll-and-Hyde condition? Current recruiting criteria focus more on the physical capabilities and moral histories of potential recruits. There is no emphasis on an individual penchant for value creation and waste reduction. "In a good-to-great transformation, people are not your most important asset. The *right* people are" (emphasis added).[47] The Air Force should selectively recruit the right people.

Resources are limited; creativity is not. The Air Force needs to find a way to change HRM practices and policies and ensure an appropriate level of balance between the other system components. The institutionalization of new HRM practices through incentives and staffing will mold the new organizational culture. Until such an emphasis, HRM systems remain a potential failure point for sustaining AFSO 21.

Potential Failure Point No. 4
Midlevel Officers—Generation TQM

Thank you sir, may I have another.

—Chip Diller, *Animal House*

A midlevel officer is either a major or a young lieutenant colonel. At this point in the career, he or she has already experienced two or three levels of professional military schools. Here, these officers study history and explore battles, leaders, and theorists to learn from their experiences and mistakes. Upon studying history, a central theme resonates throughout time—history is bound to repeat itself. When it comes to quality programs, Air Force midlevel officers are experiencing déjà vu. AFSO 21 is knocking on the door, and it looks eerily similar to TQM. How will midlevel officers accept it? The following briefly explores cynicism as it relates to midlevel officers and their opinion of AFSO 21. Therefore, midlevel officers may be a potential failure point for sustaining AFSO 21.

Generation TQM

Cynicism is "an attitude of scornful or jaded negativity, especially a general distrust of the integrity or professed motives of others."[48] Mention quality to midlevel officers, and watch them roll their eyes. After all, today's midlevel officers cut their Air Force teeth on TQM. Thus, this paper coined the term "Generation TQM" to describe them. Generation TQM characterizes Air Force officers who entered service in the early to mid-1990s and experienced TQM indoctrination. As lieutenants, today's midlevel officers were conditioned with the many promises of TQM, with phrases such as "it is not a fad, continuous improvement, responsibility of every Airman and customers are first" bandied about.[49] (It is painfully funny how AFSO 21 uses those same words.) By the late 1990s, the TQM movement fizzled away sort of like the Soviets guarding the Berlin Wall—here today, gone tomorrow.

Why are they so cynical? Many midlevel officers have seen numerous fads during their careers. As one retiring Airman described his career experiences, "I've been zero defected, total quality managed, micromanaged, one-minute

managed, synergized, had my paradigms shifted, had my paradigms broken, and been told to decrease my habits to seven."[50] Officer attitudes were not much better during the implementation of TQM. In 1993 a survey assessed the attitudes and perceptions of Pope Air Force Base (North Carolina) personnel toward TQM. The results were less than positive. "Officer perceptions and attitudes [were less] favorable as a whole than those of either the [senior NCO or civilian] groups."[51] These officers learned early in their careers about "lip service" toward TQM. Beer notes that "the result . . . was cynicism by employees who saw inconsistencies between management's espoused TQM direction and the reality of superficial change. 'This too will pass' was one of the most frequent responses to new programs, an indication of low commitment, an essential ingredient for fundamental change."[52] Why should they think anything different of AFSO 21?

Once a Cynic, Always a Cynic

The Air Force is in a tough position with midlevel officers. These officers are the gas that makes the Air Force operate. "They are the backbone . . . our aces-in-the-hole for the long war. [They] have a passion to fight to win."[53] These majors and lieutenant colonels want to do their jobs—leading troops in combat. If they wanted to value-stream a process, they would have joined GE. The Air Force cannot afford to lose these officers because the sustainment of AFSO 21 depends upon winning them over. These officers influence and shape the cultures of their organizations. Michael Beer points out that "organizational changes often stall, however, due to the inability of the leader to confront resistance to change and develop required commitment and skills [for the change effort]."[54] AFSO 21 cynics are looking for their next champion in the mold of Gen John Jumper, USAF, retired. In 2001 General Jumper delivered these lines at a Senior Noncommissioned Officer Academy graduation:

> [The Air Force] went through a period in the decade of the 90s where [it] lost some of its character as an institution. We once had a quality Air Force that was ruined by a concept known as Quality Air Force. . . . We were told to believe that big business had all the answers. "Quality" . . . let words and slogans guide our behavior. Words like "empowerment" [and] "break down barriers." We stopped mentoring our people. We lost touch with the fine art of chewing ass.[55]

The balancing of the other systems' parts may hold the key to "winning" over the midlevel officer cynics. General Creech believed that "you must change the organization conceptually and structurally to bring leadership alive at all levels."[56] Changing the HRM system and the structure may demonstrate that senior leadership really means action instead of rhetoric. According to Beer, if senior leaders "want to ensure that [AFSO 21] practices are sustained over time, they will have to consider requiring all [midlevel officers] to lead a regular process of organizational learning from which they also can learn. This will, of course, place demands on them to engage in a similar process at the top. It will be the loudest and most believable signal that senior management is serious about creating a [continuous-process-improvement] culture."[57]

The above quote originally discussed TQM; however, Beer's insights are just as applicable to today's improvement program of AFSO 21. The successful change of Air Force culture and the sustainment of AFSO 21 are dependent upon leadership. The failure to win over Generation TQM—the midlevel officers—is a potential failure point for the sustainment of AFSO 21.

Potential Failure Point No. 5
Lack of Vision

> *When you prepare well, you convey confidence and trust to the people. Lack of preparation has the opposite effect.*
>
> —John Maxwell
> *21 Irrefutable Laws of Leadership*

The Moon Speech

A vision is fundamental to a strategy; it is the strategy's guide. The vision provides a depiction of where an organization wants to be. A shared vision takes it a step further by obtaining commitment from the people for a common goal. It inspires and guides the organization to its destination. An excellent example of a shared vision was Pres. John F. Kennedy's moon speech. Duck remarks that "Kennedy's call to 'put a man on the moon by the end of the decade' is a classic vision statement—clear,

short, compelling, broad enough for all to contribute, and with an emotional hook that motivates."[58]

On the other hand, a blurry or absent vision spells certain doom to a change effort. Without a vision, will the organization reach its desired end state? How will the employees sustain their drive for excellence? Proverbs 29:18 conveys the importance of vision—"Where there is no vision, the people perish." Hence, an unclear vision is almost as ineffective as not having one at all because it can demotivate and confuse the organization. These ill effects make it difficult for employees to maintain their drive, passion, and resolve toward the change effort. As a result, change initiatives will often fail due to these shortcomings. John Kotter has asserted that in "failed transformations, you often find plenty of plans and directives and programs, but no vision."[59] True to military form, the Air Force has a plethora of plans and directives for AFSO 21. Conversely, has the Air Force met the vision component requirement?

A Vision or Not

There are a couple of ways to answer this question. The Air Force does have an official organizational vision statement; it reads, "Lasting heritage . . . limitless horizons."[60] However, this overarching vision does not clearly convey the direction in which the Air Force is heading—toward a culture of continuous process improvement. It is very difficult for Airmen to link this vision to the AFSO 21 initiative. For instance, where is the emotional hook that motivates Airmen? In similar fashion, the Air Force included a vision for AFSO 21 in the draft AFSO 21 CONOPS.[61] However, it is a very long, wordy, and vague message that is difficult for Airmen to understand; in essence, it might as well be absent. As with the Air Force vision, the AFSO 21 vision does not compel leaders or followers to embrace the idea of continuous process improvement. Both of these visions run counter to Kotter's belief that the vision must be "relatively easy to communicate and appeal[ing] to . . . employees."[62] It would seem obvious, then, that AFSO 21 needs a "moon speech" to inspire and rally the force.

On a related note, locating and obtaining the vision is part of the "relatively easy to communicate" aspect. Yet,

both visions are difficult to track down. For example, the Air Force vision is not in any of the more recent highly publicized Air Force strategic communications publications such as the *Air Force Handbook* or the *Air Force Roadmap*. It is even harder to find the AFSO 21 vision. It is in one, repeat, only one document [draft AFSO 21 CONOPS]. It would therefore seem clear that the Air Force has failed in meeting the vision component requirement. Its poor and blurry vision does not inspire or provide an emotional hook for either AFSO 21 or continuous process improvement. Specifically, what should the vision be?

Daydreams or Nightmares

The Air Force vision for AFSO 21 should encapsulate the message that the Air Force is already communicating. These messages contain meaningful words and phrases such as increasing combat capability, value to customers, improving readiness, maximizing value, and eliminating waste. This disparity between vision and message is puzzling because it appears, in a roundabout way, that Air Force senior leaders convey an appropriate vision for AFSO 21. For example, one Air Force publication states that "the AFSO 21 vision is to increase combat capability by integrating process improvement into the culture."[63] Secretary Wynne and General Moseley have communicated the previously mentioned key words and phrases in numerous speeches, articles, and memorandums. Their message seems to be sound and constant—in essence, an undeclared vision. However, AFSO 21 needs a marketable vision that captures the essence of continuous process improvement and motivates Airmen to "reach for the stars."

The Air Force must rectify this disparity between vision and message and remove a potential failure point in sustaining AFSO 21. It cannot overlook the importance of a vision because "building shared visions fosters a commitment to the long term."[64] The vision is the beacon of light that will guide the program through both calm and stormy waters. If not, according to a Japanese proverb, the Air Force may soon experience nightmares: "Vision without action is a daydream. Action without vision is a nightmare."

Conclusion

AFSO 21 signifies a shift in our thinking.

—Michael W. Wynne, secretary of the Air Force
Letter to Airmen, 8 March 2006

This paper identified potential failure points associated with successfully changing Air Force culture to one of continuous process improvement. The AFSO 21 program is the catalyst for this change initiative. AFSO 21 is the Air Force's program for maximizing value and minimizing waste in operations. The Air Force is counting on the program's return on investment to fund its recapitalization and modernization effort. Will AFSO 21 sustain itself over the long term and succeed in establishing a culture of continuous process improvement?

Overall, the Air Force's change plan appears to be proceeding according to schedule. AFSO 21 quick wins are in the news. In addition, AFSO 21 is beginning to spread to the Air Force's professional military education schools such as Air Command and Staff College. However, there are many potential weak spots, which may shift the balance between system components. As a result, misaligned components may eventually erode the AFSO 21 foundation.

Consequently, an effective change plan needs to address components other than just culture. It is the interrelationships between the various parts of the system that give it strength and longevity. Upon reviewing key AFSO 21 program documents, it does not appear that the Air Force is adequately planning for a long-term sustainment of AFSO 21. There is no mention or discussion about structure or systems. This omission may indicate that the focus is on the short-term and not a long view. In addition, there is no substantial discussion on vision or winning over midlevel officers. Once again, it appears that the Air Force is proceeding with a mandate; thus, the goal is quick wins without sufficiently planning for the long term.

This paper identified several potential failure points for senior leadership to address. These failure points are observations and not criticisms of the AFSO 21 implementation. There is still time for Air Force senior leadership to correct the system's alignment and put AFSO 21 on track for a long-term sustainment. However, the journey toward

establishing this new culture is difficult. According to Jack Welch, a culture change requires dedication and perseverance: "Even with my constant cheerleading and a lot of pounding, it took us three years to get all the best people into Six Sigma.[65] Making initiatives successful is all about focus and passionate commitment. The drumbeat must be relentless. Every leadership action must demonstrate total commitment to the initiative."[66]

The philosophy and principles behind AFSO 21 are sound. A culture of continuous process improvement will take root once the Air Force leadership fully commits to AFSO 21. Maj Kenneth R. Theriot's view on quality is just as appropriate now for AFSO 21 as it was for TQM. When leadership commits its resources to all aspects of process improvement, and where a continuous-improvement-friendly culture is established and nurtured, AFSO 21 will succeed.[67] "If [AFSO 21] is truly the centerpiece of doing business, it becomes everyone's responsibility and the cornerstone of strategy and operations."[68] Therefore, this paper asks, is AFSO 21 shifting how you think?

Notes

(All notes appear in shortened form. For full details, see the appropriate entry in the bibliography.)

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4. Gilbert, "AFSO 21," 49.
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7. Duck, *Change Monster*, xiii.
8. Walker, *Changing Organizational Culture*, 7.
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11. Kotter, *John P. Kotter*, 92.
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15. Gharajedaghi, *Systems Thinking*, 26.
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18. Ibid., 223.
19. Hughes, Ginnett, and Curphy, *Leadership*, 398.
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25. Schein, *Organizational Culture*, 10.
26. Harrison and Huntington, *Culture Matters*, xv.
27. Schein, *Organizational Culture*, 17.
28. Detert, Schroeder, and Mauriel, "Framework for Linking Culture," 851.
29. Schein, *Organizational Culture*, 11.
30. Hughes, Ginnett, and Curphy, *Leadership*, 397.
31. Welch with Byrne, *Jack: Straight from the Gut*, 433.
32. Dubrin and Ireland, *Management and Organization*, 231.
33. AFI 38-101, *Manpower and Organization*, 16.
34. Creech, *Five Pillars of TQM*, 108.
35. Harari, "Ten Reasons," 41.
36. Vest, "Tomorrow's 'Cyber Warriors,'" 5.
37. USAF, *Air Force Roadmap*, 11.
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44. Bellinger, "Bureaucracy."
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49. Palladini, "Total Quality Management," 29.
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